

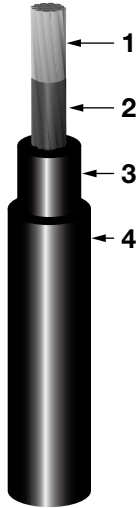
# POLYENEX – EN compliant Series – EN50264-3-1 1800V Sheathed

single  
core

Fire Protection Levels

EN45545-2  
Int. HL3 / ext.HL3

Standard  
EN50264-3-1



- Rated voltage  $U_0/U$   
AC 1.8/3.0kV
- Operating temp. range  
-40~120°C

## Properties

Halogen free, Flame resistance, Low smoke fume, Low toxicity, High chemical resistance, High mechanical properties, Heat/cold resistance, Ozone resistance

## Application

Single core cable that is applied to fixed internal/external wiring for rolling stock (Reference: EN50355:2003 EN50343:2003)

## Construction

- 1. CONDUCTOR**  
Stranded with tin-coated annealed copper wire
- 2. SEPARATING TAPE**  
Add appropriate tape if necessary
- 3. INSULATION**  
Crosslinked polyolefin (Inner : white Outer : black)  
Type EI107 or EI109 according to EN50264-1
- 4. SHEATH**  
Crosslinked polyolefin (black)  
Type EM102 or EM104 according to EN50264-1

## Cable characteristics



Rated voltage  
 $U_0/U$   
AC 1.8/3.0 kV



Operating  
temp. range  
-40~120°C



Flame  
retardant  
IEC60332-1-2



Fire retardant  
IEC60332-3-24  
IEC60332-3-25  
EN50305



Smoke density  
IEC61034-2



Gases toxicity  
EN50305



Gases  
corrosivity  
EN50267-2-2



Halogen free  
EN50267-2-1  
EN60684-2



Oil and fuel  
resistant  
IEC60811-2-1



Acid and alkaline  
resistant  
IEC60811-2-1



Ozone resistant  
EN50305



Cold resistant  
IEC60811-1-4  
EN50305



Minimum bending  
radius when  
installed  
( $D \leq 12$ ) 3D  
( $D > 12$ ) 4D



Minimum bending  
radius when  
laying  
( $D \leq 12$ ) 4D  
( $D > 12$ ) 5D

Nominal cross section (mm <sup>2</sup> )	Ave. insulation thickness (mm)	Ave. sheath thickness (mm)	Overall diameter (mm)		Max. conductor resistance at 20°C (Ω/km)	Approx. weight (kg/km)
			min	max		
25	1.8	1.0	11.5	13.4	0.795	385
35	1.8	1.0	12.7	14.9	0.565	485
50	1.8	1.0	14.1	16.5	0.393	655
70	1.8	1.0	15.8	18.5	0.277	855
95	2.2	1.0	18.0	21.0	0.210	1140
120	2.2	1.0	19.6	22.9	0.164	1380
150	2.2	1.2	21.4	25.1	0.132	1700
185	2.4	1.2	23.4	27.4	0.108	2050
240	2.4	1.2	25.9	30.3	0.0817	2650
300	2.4	1.2	28.1	32.9	0.0654	3190